

### **REMARKS**

Claims 1-13 have been cancelled. Claims 14-20 are currently pending. Claims 14 and 17-20 have been amended. Claims 21 and 22 have been added. Support for new claims 21 and 22 can be found, for example, in the specification at paragraphs 59, 63, and 64. No new matter has been added by way of this amendment.

#### **Amendments to the Specification**

Paragraph [2] on page 1 and paragraph [36] on page 9 were previously amended in a Response to Notice to File Missing Parts of Nonprovisional Application mailed to the Patent and Trademark Office on February 20, 2003, and in a Response to Non-Final Office Action mailed to the Patent and Trademark Office on November 18, 2005.

However, there appears to be some confusion during the prosecution of the application as to whether Figures 6A-6AJ should be called “Figures 6A-6J” or “6A-6AJ”. The correct notation for the figures is “6A-6AJ”. In addition, the description of Figures 6A-6J was amended in two different ways during prosecution. Therefore, the amendments included herein are not new amendments but are being made merely for clarification.

In addition, a paragraph is added after paragraph [2] in order to comply with 37 C.F.R. § 1.52(e) and to overcome the Examiner’s objections to the specification discussed below.

#### **Amendments to the Claims**

Claim 14, and 18-20 have been amended to correct grammatical errors, to include the phrase “and storing or displaying” and to define the type of “match” in step (d). Support for these amendments can be found, for example, in the specification at paragraphs 50, 52, 59, 63, 64, 81 and 87.

Claim 17 has been amended to correct grammatical errors.

**Objections to the Specification**

The Examiner states that when portions of an application are contained on a compact disc, the paper portion of the specification must identify the compact disc(s) and list the files including name, file size, and creation date on each of the compact discs. See 37 C.F.R. § 1.52(e). In addition, the Examiner states that compact discs comprising appendix A, B, and D filed March 5, 2002, are not identified in the paper portion of the specification with a listing of all of the files contained on the discs. Examiner requests that Applicants amend the specification to identify each disc and the files contained on each disc including the file name, file size, and file creation date. Lastly, the Examiner states that the compact disc originally filed on May 29, 2001 has been located and it does not contain the drawings filed March 5, 2002. Therefore the Examiner alleges that the 36 sheets of drawings (Fig. 6A through Fig. 6AJ) filed March 5, 2002 are deemed new matter and requests cancellation of the new matter.

During the phone interview, Examiner Zhou stated that the compact disc originally filed with the application on May 29, 2001 *does* contain the same drawings as those shown in the formal drawings filed with the Patent and Trademark Office on March 5, 2002. Therefore, no new matter was added. Also, as requested, Applicants have amended the specification to identify each disc and the files contained on each disc including the file name, file size, and file creation date as required by 37 C.F.R. § 1.52(e).

**Rejection of Claims under 35 U.S.C. § 101**

Claims 14, and 16-20 stand rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

Although Applicants do not necessarily agree with the Examiner's rejection for reasons previously set forth in the Response filed November 18, 2005, and as discussed in the phone interview, in an effort to expedite prosecution, Applicants have amended step (d) in claims 14, and 18-20 to read "generating and storing or displaying one or more new strings from elements identified in step (c) that have an exact match with said string representing the structure of said

desired polyketide, wherein said new string defines a PKS gene capable of producing said desired polyketide.” Applicants have added the phrase “have an exact match with” to claims 14, and 18-20 in order to address Examiner’s Zhou’s concern about the “type” of match, that was raised during the phone interview.

**CONCLUSION**

Applicants wish again to express their gratitude to Examiners Zhou and Brusca for their thoughtfulness and consideration during the phone interview and the indication that the foregoing amendments and discussion overcome the outstanding rejections.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and objection to the specification and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicants petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. **300622005500**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: November 7, 2006

Respectfully submitted,

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